

# Testing Document

- Build the the frame and chassis out of knex
- Have space to place the plate which will hold the motor and distance sensor
- Make the proper connections between the ESP32, ESC, distance sensor, and buttons.
  - The connections are as follows:
    - Buttons are connected to pin 6 and 15. 6 is for hover and 15 is for land.
    - Distance sensor is connected on pins 8 and 9. 8 is for SDA and 9 is for SCL.
    - The rest of the connections are to give proper voltage and grounding everything to the same point.
- When everything is connected, first make sure the motor and distance sensor sets up right before pressing the hovering button.
- When the hovering button is pressed, the motor will get to the distance put in the code. At this point, it will hover and can be moved to see the motor get back to the desired position.
- When wanting to land the motor, the button can be pressed. Allow the motor to lower on its own and make sure it turns off before touching the motor.
- The current setup allows for connection where the ESP32 connects to a computer and information can be seen through the serial monitor. The other is powering everything through the battery but won't get access to the serial monitor.